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Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

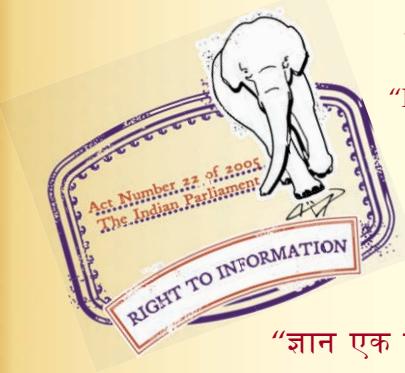
“Step Out From the Old to the New”

IS 5840-2 (1970): Dimensions of cathode-ray tubes, Part 2:
Bases [LITD 4: Electron Tubes and Display Devices]

“ज्ञान से एक नये भारत का निर्माण”

Satyanaaranay Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartṛhari—Nītiśatakam

“Knowledge is such a treasure which cannot be stolen”



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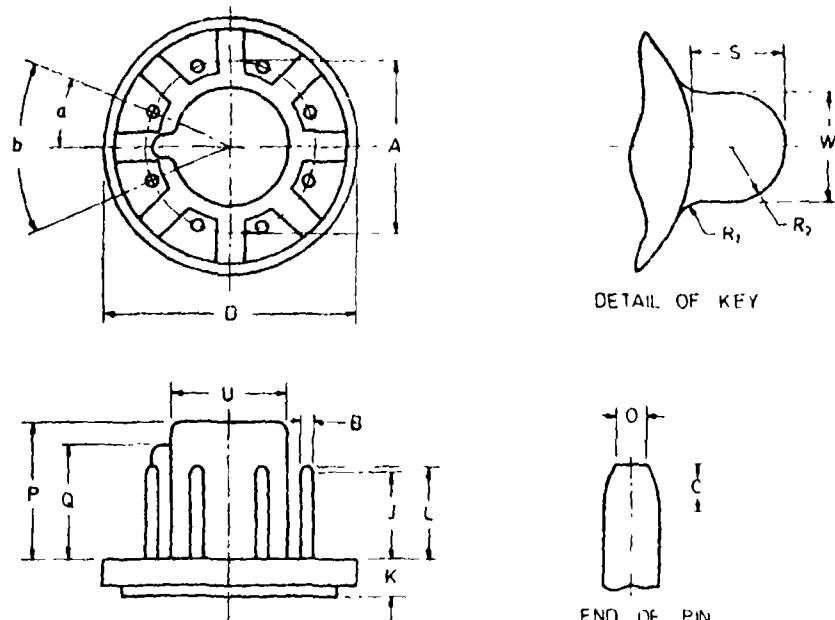
AMENDMENT NO. I MARCH 1973
TO
IS : 5840 (Part II) - 1970 DIMENSIONS OF CATHODE-RAY TUBES
PART II BASES

Addendum

(Page 4, clause 3.3) — Add the following new clause after 3.3:

4. B8H Base (One Pin Omitted)

4.1 Pin Base



Reference	Millimetres			Degrees	Note
	Min	Nom	Max		
A	—	15.24	—	—	—
B	0.966	1.016	1.066	—	—
C	0.39	—	0.88	—	1
D	22.51	—	23.21	—	—
I	6.4	—	—	—	6
K	—	3.43	—	—	3
L	—	—	8.45	—	6
O	—	—	0.63	—	2
P	—	—	12.70	—	4.6
Q	10.42	—	—	—	4.6
R ₁	—	—	0.5r	—	—
R ₂	—	—	1.0r	—	—
S	1.58	—	1.77	—	5
U	10.50	—	11.15	—	5
W	2.11	—	2.36	—	5
a	—	—	—	22.30°	—
b	—	—	—	45°	—

Note 1 — This dimension may vary within the limits shown around the periphery of any individual pin. This surface of the pin shall be convex or conical in shape and shall not be brought to a sharp point.

Note 2 — This dimension indicates the maximum flat surface at the end of the pin.

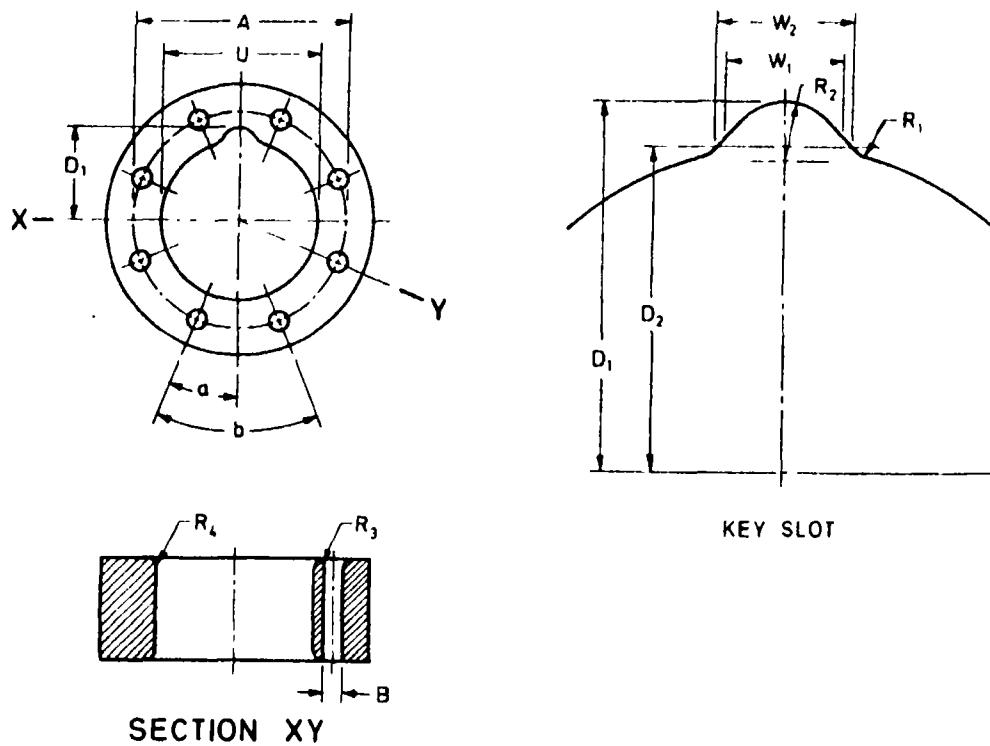
Note 3 — This dimension illustrates current practice and is not regarded as a compatibility feature.

Note 4 — A variant of this base exists where the following dimensions apply:
 Dimension P 20.82 mm, Max
 Dimension Q 17.53 mm, Min

Note 5 — These dimensions include any necessary taper.

Note 6 — The pin and spigot dimensions are measured from the rim, if present. Barriers may or may not be present but if present shall not project beyond the rim. For pin alignment use the gauge as shown in 4.2.

4.2 Pin Alignment Gauge



Reference	Millimetres			Degrees	Note
	Min	Nom	Max		
A	—	15.24	—	—	—
B	1.385	1.397	1.409	—	—
D ₁	6.414	—	6.438	—	—
D ₂	5.7023	—	5.7150	—	—
R ₁	0.584r	—	0.812r	—	—
R ₂	—	1.19r	—	—	—
R ₃	—	0.13r	—	—	—
R ₄	—	0.79r	—	—	—
T	—	9.53r	—	—	—
U	11.405	—	11.430	—	—
W ₁	2.388	—	2.413	—	—
W ₂	2.6162	—	2.6289	—	—
a	—	—	—	22.30°	—
b	—	—	—	45°	—

Note — The holes 8 have positional tolerance zones 0.020 mm dia.

Datum: Hole U and the slot.

Mounting method is optional



Indian Standard

DIMENSIONS OF CATHODE-RAY TUBES

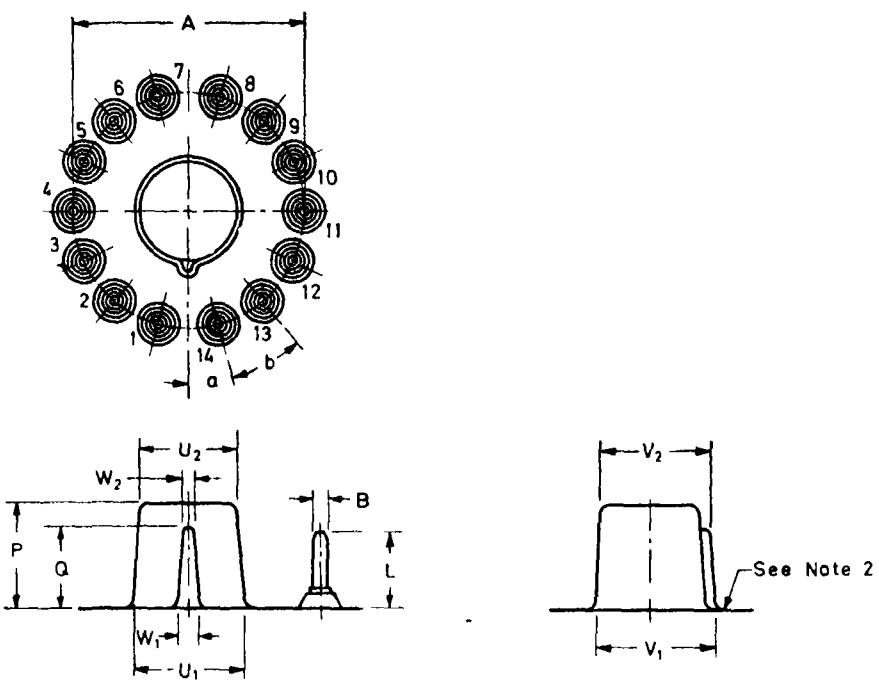
PART II BASES

1. Scope

1.1 This standard (Part II) lays down the dimensions of bases used with cathode-ray tubes employed in oscilloscopes, television and radar.

2. Diheptal (14-Pin) Base

2.1 Pin Base



Reference	Millimetres			Angle Degree	Notes
	Min	Nom	Max		
A	—	44.45	—	—	—
B	2.286	2.362	2.438	—	—
L	—	—	13.08	—	—
P	18.67	19.05	19.43	—	—
Q	15.63	15.88	16.12	—	—
U ₁	18.95	19.20	19.45	—	—
U ₂	18.80	19.05	19.30	—	—
V ₁	20.81	21.18	21.56	—	—
V ₂	20.66	21.03	21.41	—	—
W ₁	2.16	2.29	2.41	—	—
W ₂	1.91	2.03	2.15	—	—
a	—	—	—	126 ⁶ ₇	—
b	—	—	—	255 ⁶ ₇	—

Note 1—On finished article, add 0.762 mm for solder.

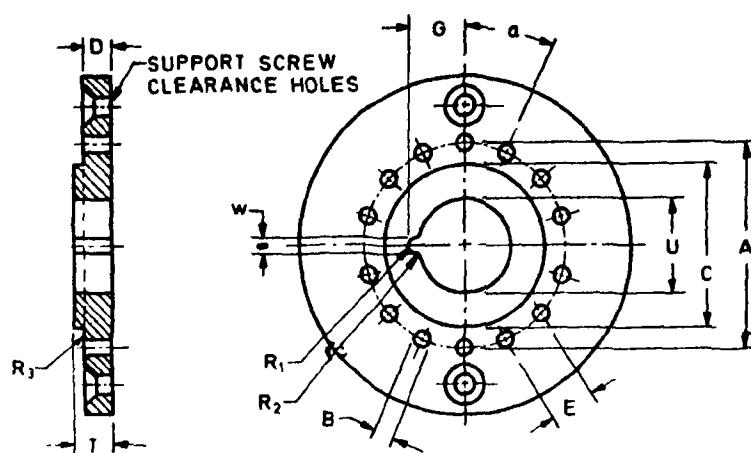
Note 2—Underside of base. Any projection on the under surface of the base other than those shown, such as a rim or external barriers, shall have a height not exceeding 2.794 mm.

Adopted 30 December 1970

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Price Rs 5.00

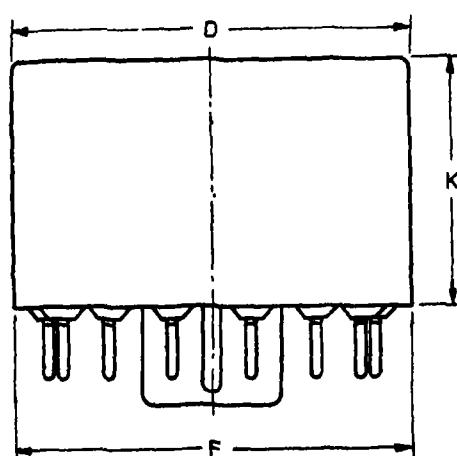
2.2 Pin Alignment Gauge



Reference	Millimetres			Angle Degree	Notes
	Min	Nom	Max		
A	44.438	44.450	44.462	—	—
B	2.604	2.616	2.628	—	—
C	—	35.56	—	—	—
D	—	6.4	—	—	—
E	9.894	9.906	9.918	—	—
G	11.811	11.836	11.887	—	—
R ₁	—	1.359	—	—	—
R ₃	—	0.25	—	—	—
R ₅	—	0.13	—	—	—
T	—	7.938	—	—	—
U	19.456 4	—	19.469 1	—	—
W	2.718	2.718	2.743	—	—
a	—	—	—	25 ⁵ ₇	—

Note — Tolerances on chord dimension between pin holes are not cumulative.

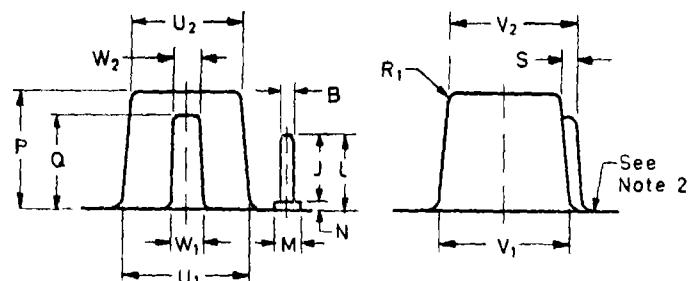
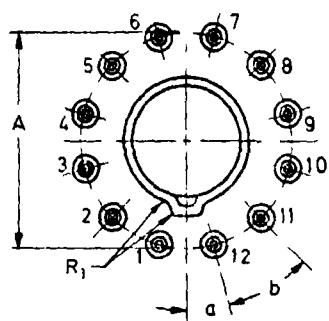
2.3 Shell Size



Reference	Millimetres			Notes
	Min	Nom	Max	
D	55.88	—	58.16	—
F	55.88	—	57.15	—
K	—	33.35	—	—

3. Duodecal 12 Pin Base

3.1 Pin Base

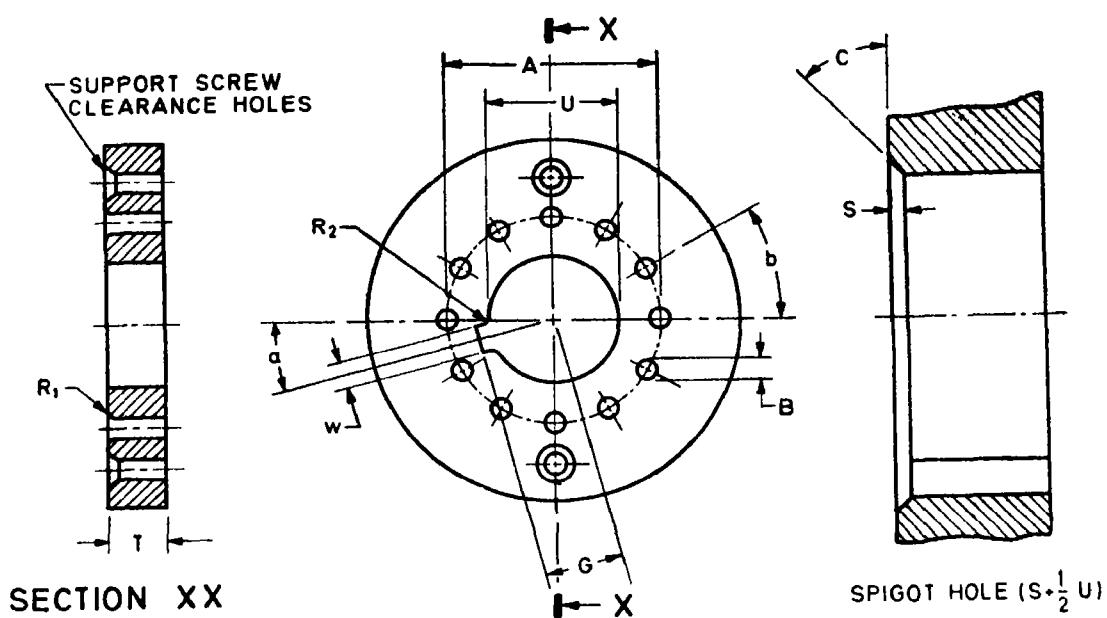


Reference	Millimetres			Angle Degree	Notes
	Min	Nom	Max		
A	—	27.00	—	—	—
B	2.286	2.362	2.438	—	—
J	8.64	—	—	—	—
L	10.85	11.10	11.35	—	—
M	—	—	3.42	—	—
N	—	—	1.23	—	—
P	13.97	14.22	15.24	—	—
Q	12.45	12.70	12.95	—	—
R ₁	—	0.79	—	—	—
S	1.66	1.78	1.90	—	—
U ₁	15.45	15.88	16.12	—	—
U ₂	15.20	15.37	15.69	—	—
V ₁	17.10	17.65	18.03	—	—
V ₂	16.85	17.15	17.60	—	—
W ₁	3.94	4.06	4.19	—	—
W ₂	3.69	3.81	3.93	—	—
a	—	—	—	15	—
b	—	—	—	30	—

Note 1 — On finished article add 0.762 mm, Max for solder.

Note 2 — Underside of base. Any projection on the under surface of the base other than those shown, such as a rim or external barriers, shall have a height not exceeding 1.651 mm.

3.2 Pin Alignment Gauge

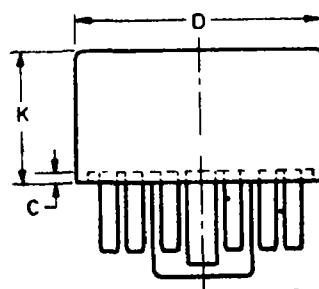


Reference	Millimetres			Angle Degree	Notes
	Min	Nom	Max		
A	—	27.000	—	—	—
B	2.616 2	—	2.628 9	—	1
G	9.983	10.008	10.058	—	—
R ₁	—	0.13	—	—	—
R ₂	0.80	—	0.90	—	—
S	0.254	—	0.381	—	2
T	—	6.4	—	—	—
U	16.129 0	—	16.141 7	—	—
w	4.191	—	4.241	—	—
a	—	—	—	15	—
b	—	—	—	30	—
C	—	—	—	45	2

Note 1 — The holes B have positional tolerance zones of 0.025 mm diameter.
Datum : hole U and the slot.

Note 2 — This dimension is permissible only.

3.3 Shell Size



Reference	Millimetres			Notes
	Min	Nom	Max	
C	0.77	—	1.77	—
D	36.71	—	38.10	—
K	—	22.15	—	—